PATENT COOPERATION TREATY

| From the INTERNATIONAL SEARCHING AUTHO | ORITY | | | | | | | | |
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| To: | | PCT | | | | | | | |
| Page White & Farrer | | | 101 | | | | | | |
| 54 Doughty Street | | WRIT | TEN OPINION OF THE | | | | | | |
| London WC1N 2LS | | | NAL SEARCHING AUTHORITY | | | | | | |
| Storbritannien | | | | | | | | | |
| | | • | (PCT Rule 43bis.1) | | | | | | |
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| | | Date of mailing | 1 0 -06- 2005 | | | | | | |
| | | (day/month/year) | . 0 00 255 | | | | | | |
| Applicant's or agent's file reference | | FOR FURTHER ACTION | | | | | | | |
| 304853WO/PRS | | | See paragraph 2 below | | | | | | |
| International application No. | nternational filing date | (day/month/year) | Priority date (day/month/year) | | | | | | |
| PCT/IB 2004/004388 | 21-12-2004 | | 24-12-2003 | | | | | | |
| International Patent Classification (IPC) or | r both national classific | eation and IPC | | | | | | | |
| G06F 3/033, H03K 17/9 | 68 | | | | | | | | |
| Applicant | | | | | | | | | |
| Nokia Corporation et | al | | | | | | | | |
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| 1. This opinion contains indications relat | ing to the following ite | ems: | | | | | | | |
| Box No. I Basis of the opin | nion | | | | | | | | |
| Box No. II Priority | | | | | | | | | |
| Box No. III Non-establishme | ent of opinion with reg | ard to novelty, inventi- | ve step and industrial applicability | | | | | | |
| Box No. IV Lack of unity of | invention | | | | | | | | |
| Box No. V Reasoned statem applicability; cit | nent under Rule 43bis. ations and explanation | (a)(i) with regard to n s supporting such state | ovelty, inventive step or industrial ement | | | | | | |
| Box No. VI Certain documen | | | | | | | | | |
| Box No. VII Certain defects i | in the international app | lication | | | | | | | |
| Box No. VIII Certain observar | tions on the internation | al application | | | | | | | |
| 2. FURTHER ACTION | | | | | | | | | |
| International Preliminary Examining Authority other than this one to be IP written opinions of this International | Authority ("IPEA") ex EA and the chosen IPE Searching Authority w | cept that this does not A has notified the Inte ill not be so considere | emational Bureau under Rule 66.1015(6) that d. | | | | | | |
| If this opinion is, as provided above, IPEA a written reply together, where of Form PCT/ISA/220 or before the contract of the second sec | considered to be a writ appropriate, with ame expiration of 22 months | ten opinion of the IPE | A, the applicant is invited to submit to the piration of 3 months from the date of mailing | | | | | | |
| For further opinions, see Form PCT/I | SA/220. | | | | | | | | |
| 3. For further details, see notes to Form | PCT/ISA/220. | | | | | | | | |
| Name and mailing address of the ISA/SI | R | Authorized officer | | | | | | | |
| Patent- och registreringsverket | - : | | | | | | | | |
| Box 5055 | | Jan Silfve | rling/MN | | | | | | |

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Form PCT/ISA/237 (cover sheet) (January 2004)

Facsimile No. +46 8 667 72 88

International application No.

PCT/IB 2004/004388

| Box No. I | Basis of this opinion |
|-----------------|---|
| 1. With rewhich | egard to the language, this opinion has been established on the basis of the international application in the language in it was filed, unless otherwise indicated under this item. |
| | This opinion has been established on the basis of a translation from the original language into the following language, , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)). |
| 2. With re | egard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the d invention, this opinion has been established on the basis of: |
| a. typ | e of material |
| | a sequence listing |
| L | table(s) related to the sequence listing |
| b. form | nat of material |
| | in written format |
| | in computer readable form |
| c. tim | e of filing/furnishing |
| | contained in the international application as filed. |
| | filed together with the international application in computer readable form. |
| | furnished subsequently to this Authority for the purposes of search. |
| 3. | In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished. |
| 4. Additi | ional comments: |
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International application No.

PCT/IB 2004/004388

| Box No. I | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
|-------------|---|
| | on whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be y applicable have not been examined in respect of: |
| | the entire international application |
| \boxtimes | claims Nos. 24-30 |
| because | |
| | the said international application, or the said claims Nos. |
| İ | relate to the following subject matter which does not require an international preliminary examination (specify): |
| | the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify): |
| | The claims, or said claims Nos. are so inadequately supported |
| | by the description that no meaningful opinion could be formed. |
| | no international search report has been established for said claims Nos. 24-30 |
| | the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that: |
| | the written form has not been furnished |
| ĺ | does not comply with the standard |
| | the computer readable form has not been furnished does not comply with the standard |
| | the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not |
| | comply with the technical requirements provided for in the Annex C-bis of the Administrative Instructions. |
| | See Supplemental Box for further details. |

10/583986 AP3 Rec'd PCI/FIO 32 JUN 2320

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB 2004/004388

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| Novelty (N) | Claims | 9-11, 13-14, 16-17, 20-23 | YES |
|-------------------------------|--------|---------------------------|-----|
| | Claims | 1-8, 12, 15, 18-19, 31-36 | NO |
| Inventive step (IS) | Claims | | YES |
| | Claims | 1-23, 31-36 | NO |
| Industrial applicability (IA) | Claims | 1-23, 31-36 | YES |
| | Claims | | NO |

2. Citations and explanations:

Reference is made to the following documents:

D1: US 4254333 A D2: DE 3306941 A1

D1 relates to an optoelectronic circuit element, e.g. a switching device, comprising at least one radiation-emitting element (LED) 1, a radiation-propagating unit 5 and at least one radiation-sensitive element (PT) 3. The LED and PT are arranged such as that the radiation from the LED is received by the PT after propagating with total internal reflection in the radiation-propagating unit. If the propagating unit is contacted by an actuating body, e.g. a finger, between the LED and PT, some of the radiation is refracted out of the propagating unit. This loss in radiation is registered in the PT as an actuation of the switch.

D2 also refers to an optoelectronic device like that in D1. In figure 2 is shown that a plurality of devices can be arranged in a grid so the position of a contact can be indicated.

The light signal arrangement used as an analogue navigation device in claim 1 is known from both D1 and D2. The use of the light signal arrangement as an analogue navigation device can be derived from D1, column 9, line 28 to line 41 and from figure 2 in D2. In D1, column 9, line 15 to line 19 is stated that a soft rubber body can be used as an actuator

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of: Box V

in stead of a finger.

Thus, the invention according to claims 1-8, 12, 15, 18-19 and 31-36 is known from D1 and/or D2.

Claims 9-11, 13-14, 16-17 and 20-22 are only showing details which are considered obvious for a person skilled in the art.

Therefore, the invention according to claims 9-11, 13-14, 16-17 and 20-22 is considered to lack inventive step.

Claim 23 should probably refer to "An analogue navigation device..." in stead of "A handheld electronic device...". If so, it is known from D1, if not, see comment on claims 25-29.

A claim that only refers to a reference to figures as in claims 24 and 30 is not allowed.

An independent claim shall fully describe the invention. Claim 25 is not written in such a manner that it can be allowed. Therefore, claims 25-29 is not searched.

International application No.

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| Box No. VII | Cert | ain de | fects in | the i | ntern | ationa | l appli | ication | | | | | | | | | |
|--|---------|----------|--------------|-------|-------|--------------|--------------|--------------|-----------|-------------|-----------|------------|-------------|------|------|-----|--|
| The following defects in the form or content of the international application have been noted: | | | | | | | | | | | | | | | | | |
| Claim device | 23 " | sh in | ould stea | l pi | rob | ably "A h | y ro nand | efer held | to ele | "An ctro | an nic | alog de | gue vice | nav: | igat | ion | |
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International application No.

PCT/IB 2004/004388

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawing or on the question whether the claim are fully supported by the description, are made:

Claims 24 and 30 are not allowed because they only refer to a reference to the figures.

Claims 25-29 is not searched because an independent claim shall fully describe the invention. Claim 25 is not written in such a manner and cannot be allowed.